

8. (new) The plastic syringe barrel of claim 1, wherein only the inner peripheral surface of the outer cylinder has a roughened surface.

9. (new) The plastic syringe barrel of claim 1, wherein the syringe barrel is made of cyclic polyolefin resin.

#### REMARKS/ARGUMENTS

Claims 1, 3 and 5 are now pending, a total of 3 claims. Claim 1 is independent. Claims 1 and 3 stand rejected under 35 U.S.C. § 112, as being indefinite. Claim 1 was also rejected under 35 U.S.C. §§ 101 and 102. Claim 3 stands rejected under 35 USC § 103(a). Claim 5 was rejected under 35 USC § 102.

Claims 2 and 4 have been canceled. Claim 6 was withdrawn from consideration when Applicant elected without traverse to prosecute the claims of Group I, claims 1-5. New claims 7, 8 and 9 have been added.

Applicant respectfully requests reconsideration of the application.

The amendments to the claims merely clarify their scope, and are not made for a substantial reason related to patentability.

Applicant believes that amended Claim 1 has sufficient antecedent basis for all terms used therein, and that it particularly points out and distinctly claims the subject matter of the invention. As shown below, amended Claims 1, 3 and 5, and new Claims 7, 8 and 9 are not anticipated, taught, or suggested by the prior art of record.

## **I. Independent Claim 1**

The Examiner states that Moncada et al. teach a syringe barrel (the combination of syringe barrel, item 84 and adapter, item 80) comprising a luer lock portion (the combination of items 108 and 116 and the space between items 108 and 116, Fig. 5) formed in a nozzle portion (adapter body, item 20, Fig. 1 and 2 and adapter, item 80, Fig. 5). Applicant respectfully submits that Moncada et al. does not teach or suggest a syringe barrel having a nozzle portion and luer lock portion as recited in Claim 1. First, the combination of item 84 and adapter 80 is not a syringe barrel. Moncada et al. expressly identify item 84 as the “syringe barrel.” (Col. 5, lines 8-9.) Second, Moncada et al. teach that the adapter invention is mounted on an unmodified syringe in order to engage known safety devices, such as needle protecting sleeves or guards. (Col. 2, lines 11-14.) Thus, as illustrated in Fig. 5, the Moncada et al. adapter (item 80) is a device separate from the syringe barrel (item 84), and mounted on the outside of the syringe (item 82). Indeed, because the adapter 80 is an external fitting, there is a “gap between the barrel 84 and the adapter 80.” (Col. 5, line 55-63.)

As shown in Fig. 5, a luer lock (item 92) is formed on the outside of syringe barrel 84, and connects syringe 82 to adapter 80. More particularly, adapter 80 engages the “tapered exterior surface 110” of luer lock 92 on syringe barrel 84 (Col. 5, line 68 - col. 6, line 6.) Thus, there is nothing in Moncada et al. to teach or suggest that the syringe barrel includes a nozzle portion with an inner cylinder and an outer cylinder, and that a luer lock is formed inside between an inner peripheral surface of the outer cylinder of the nozzle and an outer peripheral surface of the inner cylinder of the nozzle, as recited in Claim 1. On the contrary, Moncada teaches away from modifying the syringe, or any portion thereof. (Col. 1, line 61- col. 2, line 5; and Col. 8, lines 24-27.)

The Examiner also comments that, in Moncada et al., the luer lock connector portion of adaptor 80 (item 30, Fig. 1 or item 106, Fig. 5) includes ears (item 34, Fig. 1 or item 112, Fig. 5), and that teeth (item 48, Fig. 1) may be formed on the rear surface (item 50, Fig. 1) of the ears. However, as explained above, Moncada et al does not teach a luer lock, as recited in Claim 1. Further, the teeth on the ears of the Moncada et al luer lock do not address the problem solved by the roughened surface of the luer lock portion of Claim 1. The Moncada et al adapter allows for mounting a safety device on an unmodified syringe; any luer locks -- and teeth formed thereon -- are external to the syringe barrel. The luer lock portion of Claim 1 engages the inside of the nozzle with an extension tube or like device for discharging liquid from the syringe barrel.

## **II. Dependent Claim 3**

Dependent claim 3 is patentable with independent claim 1, as discussed above. In addition, dependent claim 3 recites features that further distinguish the art. In particular, as the Examiner acknowledges, Moncada et al. fail to teach that the surface of the screw thread or a screw root portion formed between adjacent ridges of the screw thread has a roughened surface. *See* 04/09/2004 Office action, at 5. Furthermore, Moncada et al. does not teach or suggest that roughening the surface of the screw thread or the surface of the screw root portion improves engageability of an extension tube or like device attached to the nozzle of the syringe barrel via the luer lock formed therein.

## **III. Dependent Claims 5, and New Claims 7-9**

Dependent claims 5 (amended) and 7-9 (new) are patentable with independent claim 1, as discussed above. Dependent claims 5, 7, 8 and 9 recite features that further distinguish the art. The syringe barrels of dependent claims 5 and 7 include a roughened surface

with indentations formed by blast treatment. New dependent claim 8 provides for roughening only on the inner peripheral surface of the outer cylinder of the nozzle. In new dependent claim 9, the material of the plastic syringe barrel is cyclic polyolefin resin.

In view of the amendments and remarks, Applicant respectfully submits that the claims are in condition for allowance, and requests that the application be approved for issuance.

Enclosed is a Petition for Extension of Time for two (2) months. In the event that further extension of time is required, Applicant petitions for that extension of time required to make this response timely. Kindly charge any additional fee, or credit any surplus, to Deposit Account No. 23-2405, Order No. 114174.00013.

Respectfully submitted,

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Dated: September 9, 2004

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